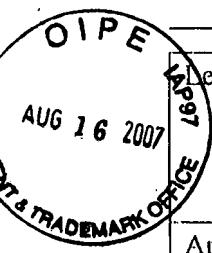


THE STATE INTELLECTUAL PROPERTY OFFICE
OF THE PEOPLE'S REPUBLIC OF CHINA



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|--|---|----------------------------------|
| Become Intellectual Property Agent Ltd. Floor 16, Building 2, No.48-Jia Zhichun Rd., Haidian District, Beijing 100098 Jinguo XU Jinguo QI | | Date of issuance June 8, 2007 |
| Application No.: 200310121732.8 | | |
| Applicant: | LG Philips LCD Co., Ltd. | |
| Title of the Invention: | Touch Panel For Display Device And Method Of Fabricating The Same | |

Notification of the Second Office Action

1. The examiner has received the statement on April 24, 2007 for the first office action issued by the CSIRO. On the basis of this, the examiner preceded the substantive examination the above-identified application.
2. The amendment submitted on _____ do not comply with Rule 51(3) of the Implementing Regulations of Chinese Patent Law. Applicant should submit acceptable documents, or else present application will be deemed withdrawal.
3. A continued examination is conducted on the basis of the following documents:
 - The amended application documents submitted with the prior statement.
 - The application documents directed in previous Notification of Examination and the substitute pages of application documents attached in the above statement.
 - The application documents directed in previous Notification of Examination.
 - The application documents defined by Decision of Re-examination.
 - _____
4. No new reference documents were cited in this office action;
 - The following reference documents have been cited in this office action (their serial numbers will be referred to in the ensuing examination procedure):

| No. | Number(s) or Title(s) of Reference(s) | Date of Publication (or the filing date of conflicting application) |
|-----|---------------------------------------|--|
| 2 | JP2002182854A | June 28, 2002 |

5. The conclusive opinion of the examination is as following:

- The description:
 - the subject matter of the application falls into the scope, within which no patent right shall be granted, defined by Article 5 of the Chinese Patent Law.
 - The description is not in conformity with the provisions of Article 26(3) of the Chinese Patent Law.
 - the amendments of the description is not in conformity with the provisions of Article 33 of the Chinese Patent Law.
 - The description is not in conformity with the provisions of Rule 18 of the Implementing Regulations of the Chinese Patent Law.
 - _____
- The claims,
 - claims _____ do not possess novelty provided by Article 22(2) of the Chinese Patent Law.
 - claims 1-12 do not possess inventiveness provided by Article 22(3) of the Chinese Patent Law.
 - claim _____ does not possess practical applicability provided by Article 22(4) of the Chinese Patent Law.

claim _____ falls into the scope, within which no granted patent right shall be granted, provided by Article 25 of the Chinese Patent Law

claims _____ are not in conformity with the provisions of Article 26(4) of the Chinese Patent Law.

claims _____ are not in conformity with the provisions of Article 31(1) of the Chinese Patent Law.

claims _____ are not in conformity with the provisions of Article 33 of the Chinese Patent Law.

claim _____ is not in conformity with definition of the invention provided by Rule 2(1) of the Implementing Regulations of the Chinese Patent Law.

claims _____ are not in conformity with the provisions of Rule 20 of the Implementing Regulations of the Chinese Patent Law.

claims _____ are not in conformity with the provisions of Rule 21 of the Implementing Regulations of the Chinese Patent Law.

claims _____ are not in conformity with the provisions of Rule 22 of the Implementing Regulations of the Chinese Patent Law.

claims _____ are not in conformity with the provisions of Rule 23 of the Implementing Regulations of the Chinese Patent Law.

The detail analysis for above conclusive opinion is described in the text of this office action.

6. On the basis of the above conclusive opinion, the examiner holds that:

the applicant should make amendment in accordance with the requirements described in the text of this office action.

the applicant should expound reasons for that the above mentioned patent application can be granted the patent right, and make amendments to the specification of which is not in conformity with the provisions as described in text of this office action; otherwise the patent right shall not be granted.

the patent application does not possess any substantive patentable contents, if the applicant fails to expound reasons or the reasons expounded are not sufficient, this application will be rejected.

7. The applicant shall pay more attention to the matters as following:

(1) In accordance with the provisions of Article 37 of the Chinese Patent Law, the applicant shall submit the response within two months from the date of receiving this office action. If the applicant fails to respond within the time limit without any justified reason, the application shall be deemed to have been withdrawn.

(2) The amendment modified by the applicant shall be in conformity with the provisions of Article 33 of the Chinese Patent Law, and shall be submitted in duplicate copies and in format in accordance with the relevant provisions of the Examination Manual.

(3) The applicant's response and/or amendment documents shall be mailed or submitted to the Receiving Department of the Chinese Patent Office, the documents which are not mailed or submitted to the Receiving Department do not possess legal effect.

(4) The applicant and/or his (its) agent shall not come to the Chinese Patent Office to interview with the examiner without an appointment.

8. The text of this office action consists of a total of 5 sheets, and is accompanied by the following annexes:

the copies of the cited reference documents consist of _____ sets and _____ sheets.

Examiner: Nan WANG (A631)

May 18, 2007

Department: Electricity Examination Department

Text of the Second Office Action

Application No.: 200310121732.8

The applicant filed the Observations and the amended application documents on April 24, 2007. After reading the above documents carefully, the examiner continues the examination for the present application, conduct a supplemental search and points out his opinions as follows:

1. Claim 1 is rejected according to Article 22.3 of the Chinese Patent Law for having no inventiveness.

The reference document 2 (JP2002182854A) discloses a touch panel for a display device having a driver IC, and especially discloses the following technical features that (seeing Paragraph 38 of Column 11 to Paragraph 52 of Column 13 and Paragraphs 107-108 of Column 19 of the description and Figs. 1-22 of the reference document 2): the touch panel comprises upper and lower substrates; PET films (being equivalent to the first and second transparent electrodes of claim 1) on opposing surfaces of the upper and lower substrates; a plurality of metal electrodes in a circumference of the PET films; a flexible printed cable having a plurality of signal applying lines extended from the upper and lower substrates to a rear side of the display device for applying signal voltages to the metal electrodes, and being bent at a corner of the upper and lower substrates to the rear side of the display device, wherein the signal applying lines for applying signals to the metal electrodes on the upper substrate are printed on an upper surface of the flexible printed cable, the signal applying lines for applying signals to the metal electrodes on the lower substrate are printed on a lower surface of the flexible printed cable, and the flexible printed cable has a plurality of through-holes before the flexible printed cable connects to the metal electrodes such that the signal applying lines of the lower surface of the flexible printed cable are disposed on the upper surface of the flexible printed cable to prevent the short-circuit. The distinctive technical feature of the technical solution claimed by claim 1 over this reference document is that "the flexible printed cable has a plurality of through-holes before the flexible printed cable overlaps the driver IC". Based on the distinctive technical feature, it can be determined that the real technical problem to be resolved by claim 1 over the reference document 2 is to prevent the short-circuit between the flexible printed cable between the driver IC. However, the reference document 2 provides the technical inspiration of "the flexible printed cable has a plurality of through-holes before the flexible printed cable connects to the metal electrodes such that the signal applying lines of the lower surface of the flexible printed cable are disposed on the upper surface of the flexible printed cable to prevent the short-circuit", and it is easy to expect with the combination of the common sense that the flexible printed cable has a plurality of through-holes before the flexible printed cable overlaps the driver IC to prevent the short-circuit between the flexible printed cable between the driver IC. Therefore, it is obvious for the person skilled in the art to obtain the technical solution claimed by claim 1 based on the reference document 2 by combining the common sense, thus the technical solution claimed by claim 1 does not possess the prominent substantial feature and the notable progress, thus it does not possess the inventiveness.

2. Claim 2 is rejected according to Article 22.3 of the Chinese Patent Law for having no inventiveness.

Claim 2 further defines claim 1, the additional technical feature thereof is the common used technical means in the field of fabricating the flexible printed cable, and it belongs to the common sense. Therefore, it is obvious for the person skilled in the art to obtain the technical solution claimed by claim 2 based on the reference document 2 by combining the common sense, thus when claim 1 to which claim 2 refers does not possess the inventiveness., claim 2 does not either.

3. Claim 3 is rejected according to Article 22.3 of the Chinese Patent Law for having no inventiveness.

Claim 3 further defines claim 1, and the additional technical feature thereof is disclosed in the reference document 2 (seeing Paragraph 38 of Column 11 to Paragraph 52 of Column 13 and Paragraphs 107-108 of Column 19 of the description and Figs. 1-22 of the reference document 2) which discloses that the flexible printed cable extends through the driver IC of the display device to be connected to a printed circuit board. Therefore, it is obvious for the person skilled in the art to obtain the technical solution claimed by claim 3 based on the reference document 2 by combining the common sense, thus when claim 1 to which claim 3 refers does not possess the inventiveness., claim 3 does not either.

4. Claim 4 is rejected according to Article 22.3 of the Chinese Patent Law for having no inventiveness.

Claim 4 further defines claim 1, and the additional technical feature thereof is disclosed in the reference document 2 (seeing Paragraph 38 of Column 11 to Paragraph 52 of Column 13 and Paragraphs 107-108 of Column 19 of the description and Figs. 1-22 of the reference document 2) which discloses that the metal electrodes comprise: first and second metal electrodes being electrically connected to the first PET film in the circumference of the first PET film along a X-axis direction, and third and fourth metal electrodes electrically connected to the second PET film in the circumference of the upper and lower sides on the second PET film along a Y-axis direction. Therefore, it is obvious for the person skilled in the art to obtain the technical solution claimed by claim 4 based on the reference document 2 by combining the common sense, thus when claim 1 to which claim 4 refers does not possess the inventiveness., claim 4 does not either.

5. Claim 5 is rejected according to Article 22.3 of the Chinese Patent Law for having no inventiveness.

Claim 5 further defines claim 4, and the additional technical feature thereof is disclosed in the reference document 2 (seeing Paragraph 38 of Column 11 to Paragraph 52 of Column 13 and Paragraphs 107-108 of Column 19 of the description and Figs. 1-22 of the reference document 2) which discloses that the first, second, third, and fourth metal electrodes are connected to the first, second, third, and fourth signal applying lines, respectively. Therefore, it is obvious for the person skilled in the art to obtain the technical solution claimed by claim 5 based on the reference document 2 by combining the common sense, thus when claim 4 to which claim 5 refers does not possess the inventiveness., claim 5 does not either.

6. Claim 6 is rejected according to Article 22.3 of the Chinese Patent Law for having no inventiveness.

Claim 6 further defines claim 1, and the additional technical feature thereof is disclosed in the reference document 2 (seeing Paragraph 38 of Column 11 to Paragraph 52 of Column 13 and Paragraphs 107-108 of Column 19 of the description and Figs. 1-22 of the reference document 2) which discloses that the display device is a liquid crystal display device. Therefore, it is obvious

for the person skilled in the art to obtain the technical solution claimed by claim 6 based on the reference document 2 by combining the common sense, thus when claim 1 to which claim 6 refers does not possess the inventiveness, claim 6 does not either.

7. Claim 7 is rejected according to Article 22.3 of the Chinese Patent Law for having no inventiveness.

The reference document 2 (JP2002182854A) discloses a method of fabricating a touch panel for a display device having a driver IC, and especially discloses the following technical features that (seeing Paragraph 38 of Column 11 to Paragraph 52 of Column 13 and Paragraphs 107-108 of Column 19 of the description and Figs. 1-22 of the reference document 2): forming upper and lower substrates; forming PET films (being equivalent to the first and second transparent electrodes of claim 7) on opposing surfaces of the upper and lower substrates; forming a plurality of metal electrodes in a circumference of the PET films; forming a flexible printed cable having a plurality of signal applying lines extended from the upper and lower substrates to a rear side of the display device for applying signal voltages to the metal electrodes, and being bent at a corner of the upper and lower substrates to the rear side of the display device, wherein the signal applying lines for applying signals to the metal electrodes on the upper substrate are printed on an upper surface of the flexible printed cable, the signal applying lines for applying signals to the metal electrodes on the lower substrate are printed on a lower surface of the flexible printed cable, and the flexible printed cable has a plurality of through-holes before the flexible printed cable connects to the metal electrodes such that the signal applying lines of the lower surface of the flexible printed cable are disposed on the upper surface of the flexible printed cable to prevent the short-circuit. The distinctive technical feature of the technical solution claimed by claim 7 over this reference document is that “the flexible printed cable has a plurality of through-holes before the flexible printed cable overlaps the driver IC”. Based on the distinctive technical feature, it can be determined that the real technical problem to be resolved by claim 7 over the reference document 2 is to prevent the short-circuit between the flexible printed cable between the driver IC. However, the reference document 2 provides the technical inspiration of “the flexible printed cable has a plurality of through-holes before the flexible printed cable connects to the metal electrodes such that the signal applying lines of the lower surface of the flexible printed cable are disposed on the upper surface of the flexible printed cable to prevent the short-circuit”, and it is easy to expect with the combination of the common sense that the flexible printed cable has a plurality of through-holes before the flexible printed cable overlaps the driver IC to prevent the short-circuit between the flexible printed cable between the driver IC. Therefore, it is obvious for the person skilled in the art to obtain the technical solution claimed by claim 7 based on the reference document 2 by combining the common sense, thus the technical solution claimed by claim 7 does not possess the prominent substantial feature and the notable progress, thus it does not possess the inventiveness.

8. Claim 8 is rejected according to Article 22.3 of the Chinese Patent Law for having no inventiveness.

Claim 8 further defines claim 7, the additional technical feature thereof is the common used technical means in the field of fabricating the flexible printed cable, and it belongs to the common sense. Therefore, it is obvious for the person skilled in the art to obtain the technical solution claimed by claim 8 based on the reference document 2 by combining the common sense,

thus when claim 7 to which claim 8 refers does not possess the inventiveness., claim 8 does not either.

9. Claim 9 is rejected according to Article 22.3 of the Chinese Patent Law for having no inventiveness.

Claim 9 further defines claim 7, and the additional technical feature thereof is disclosed in the reference document 2 (seeing Paragraph 38 of Column 11 to Paragraph 52 of Column 13 and Paragraphs 107-108 of Column 19 of the description and Figs. 1-22 of the reference document 2) which discloses that the flexible printed cable extends through the driver IC of the display device to be connected to a printed circuit board. Therefore, it is obvious for the person skilled in the art to obtain the technical solution claimed by claim 9 based on the reference document 2 by combining the common sense, thus when claim 7 to which claim 9 refers does not possess the inventiveness., claim 9 does not either.

10. Claim 10 is rejected according to Article 22.3 of the Chinese Patent Law for having no inventiveness.

Claim 10 further defines claim 7, and the additional technical feature thereof is disclosed in the reference document 2 (seeing Paragraph 38 of Column 11 to Paragraph 52 of Column 13 and Paragraphs 107-108 of Column 19 of the description and Figs. 1-22 of the reference document 2) which discloses that forming first and second metal electrodes being electrically connected to the first PET film in the circumference of the first PET film along a X-axis direction, and forming third and fourth metal electrodes electrically connected to the second PET film in the circumference of the upper and lower sides on the second PET film along a Y-axis direction. Therefore, it is obvious for the person skilled in the art to obtain the technical solution claimed by claim 10 based on the reference document 2 by combining the common sense, thus when claim 7 to which claim 10 refers does not possess the inventiveness., claim 10 does not either.

11. Claim 11 is rejected according to Article 22.3 of the Chinese Patent Law for having no inventiveness.

Claim 11 further defines claim 10, and the additional technical feature thereof is disclosed in the reference document 2 (seeing Paragraph 38 of Column 11 to Paragraph 52 of Column 13 and Paragraphs 107-108 of Column 19 of the description and Figs. 1-22 of the reference document 2) which discloses that the first, second, third, and fourth metal electrodes are connected to the first, second, third, and fourth signal applying lines, respectively. Therefore, it is obvious for the person skilled in the art to obtain the technical solution claimed by claim 11 based on the reference document 2 by combining the common sense, thus when claim 10 to which claim 11 refers does not possess the inventiveness., claim 11 does not either.

12. Claim 12 is rejected according to Article 22.3 of the Chinese Patent Law for having no inventiveness.

Claim 12 further defines claim 7, and the additional technical feature thereof is disclosed in the reference document 2 (seeing Paragraph 38 of Column 11 to Paragraph 52 of Column 13 and Paragraphs 107-108 of Column 19 of the description and Figs. 1-22 of the reference document 2) which discloses that the display device is a liquid crystal display device. Therefore, it is obvious for the person skilled in the art to obtain the technical solution claimed by claim 12 based on the reference document 2 by combining the common sense, thus when claim 7 to which claim 12 refers does not possess the inventiveness., claim 12 does not either.

Based on the above reasons, the present application could not be granted yet according to the current text. The applicant should amend the application document within the time limit specified in the present notification to overcome the existed defect. The amendments to the application documents shall be in conformity with Article 33 of the Patent Law, that is, the amendments may not go beyond the scope of the disclosure contained in the initial description and claims stated.

Examiner: Nan WANG
Code: A631



中华人民共和国国家知识产权局

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| 100098 | 发文日 |
| 北京市海淀区知春路 48 号 2 号楼 16 层 北京律诚同业知识产权代理有限公司 徐金国,祁建国 | |
| 申请号: 2003101217328 | |
| 申请人: LG. 菲利浦 LCD 株式会社 | |
| 发明名称: 用于显示装置的触摸面板及其制造方法 | |



第 2 次审查意见通知书

1. 审查员已收到申请人于 2007 年 4 月 24 日提交的意见陈述书, 在此基础上审查员对上述专利申请继续进行实质审查。

根据国家知识产权局专利复审委员会于 年 月 日作出的复审决定, 审查员对上述专利申请继续进行实质审查。



2. 申请人于 年 月 日提交的修改文件, 不符合专利法实施细则第 51 条第 3 款的规定。

3. 继续审查是针对下述申请文件进行的:

上述意见陈述书中所附的经修改的申请文件。

前次审查意见通知书所针对的申请文件以及上述意见陈述书中所附的经修改的申请文件替换页。

前次审查意见通知书所针对的申请文件。

上述复审决定所确定的申请文件。



4. 本通知书未引用新的对比文件。

本通知书引用下述对比文件(其编号续前, 并在今后的审查过程中继续沿用):

| | | |
|----|---------------|-----------------|
| 编号 | 文件号或名称 | 公开日期(或抵触申请的申请日) |
| 2 | JP2002182854A | 2002-6-28 |

5. 审查的结论性意见:

关于说明书:

申请的内容属于专利法第 5 条规定的不授予专利权的范围。

说明书不符合专利法第 26 条第 3 款的规定。

说明书的修改不符合专利法第 33 条的规定。

说明书的撰写不符合专利法实施细则第 18 条的规定。



关于权利要求书:

权利要求 不具备专利法第 22 条第 2 款规定的创造性。

权利要求 1-12 不具备专利法第 22 条第 3 款规定的创造性。

权利要求 不具备专利法第 22 条第 4 款规定的实用性。

权利要求 属于专利法第 25 条规定的不授予专利权的范围。

权利要求 不符合专利法第 26 条第 4 款的规定。

权利要求 不符合专利法第 31 条第 1 款的规定。

权利要求 的修改不符合专利法第 33 条的规定。

权利要求 不符合专利法实施细则第 2 条第 1 款的规定。

权利要求 不符合专利法实施细则第 13 条第 1 款的规定。



第二次审查意见通知书正文

申请号：2003101217328

申请人在2007年4月24日提交了意见陈述书和经过修改的申请文件，审查员在阅读了上述文件后，对本案继续进行审查并进行了补充检索，提出如下审查意见。

1、权利要求1所要求保护的技术方案不具备专利法第二十二条第三款规定的创造性。对比文件2（JP2002182854A）公开了一种具有驱动器IC的显示装置的触摸面板，并具体公开了以下的技术特征（参见对比文件2的说明书第11栏第38段—第13栏第52段，第19栏第107—108段、图1—22）：该触摸面板包括上基板和下基板；在上基板和下基板相对的表面上分别设置有PET薄膜（相当于权利要求1的第一和第二透明电极）；在PET薄膜周围设置有多个金属电极；柔性印刷电缆，所述柔性印刷电缆具有从上基板和下基板延伸到显示装置的背面并用来向金属电极供给信号电压的多条信号供给线，且该柔性印刷电缆在上基板和下基板的角部向显示装置的背面弯曲，其中，将用于向上基板上的金属电极供给信号的信号供给线印刷在柔性印刷电缆的上表面上，而将用于向下基板上的金属电极供给信号的信号供给线印刷在柔性印刷电缆的下表面上，并且该柔性印刷电缆在与金属电极连接前具有多个通孔，从而将柔性印刷电缆的下表面的信号供给线设置在柔性印刷电缆的上表面上以防止发生短路。该权利要求所要求保护的技术方案与该对比文件所公开的技术内容相比，其区别仅在于“柔性印刷电缆在交叠驱动器IC之前具有多个通孔”。基于上述区别技术特征可以确定，权利要求1相对于对比文件2实际所解决的问题是：防止柔性印刷电缆与驱动器IC之间发生短路。然而，当本领域的技术人员在面对防止柔性印刷电缆与驱动器IC之间发生短路的问题时，根据对比文件2给出的“柔性印刷电缆在与金属电极连接前具有多个通孔，从而将柔性印刷电缆的下表面的信号供给线设置在柔性印刷电缆的上表面上以防止发生短路”的技术启示并结合其掌握的公知常识，容易想到在柔性印刷电缆与驱动器IC交叠之前在其上设置多个通孔从而防止印刷电缆与驱动器之间发生短路。因此，在对比文件2的基础上结合本领域的公知常识以获得权利要求1所要求保护的技术方案，对所属技术领域的技术人员来说是显而易见的，因此权利要求1所要求保护的技术方案不具备突出的实质性特点和显著的进步，因而不具备创造性。

2、权利要求2对权利要求1作了进一步限定，其附加技术特征为本领域制造柔性印

刷电缆的惯用技术手段，属于公知常识，因此在对比文件2的基础上结合公知常识从而得到权利要求2所要求保护的技术方案对本领域普通技术人员来说是显而易见的，在上述权利要求所引用的权利要求1不具备创造性的情况下，从属权利要求2也不具备专利法第二十二条第三款规定的创造性。

3、权利要求3对权利要求1作了进一步限定，其附加技术特征已经被对比文件2所公开（参见对比文件2的说明书第11栏第38段—第13栏第52段，第19栏第107—108段、图1—22）：柔性印刷电缆通过显示装置的驱动器IC 延伸，以连接到印刷电路板。因此在对比文件2的基础上结合公知常识从而得到权利要求3所要求保护的技术方案对本领域普通技术人员来说是显而易见的，在上述权利要求所引用的权利要求1不具备创造性的情况下，从属权利要求3也不具备专利法第二十二条第三款规定的创造性。

4、权利要求4对权利要求1作了进一步限定，其附加技术特征已经被对比文件2所公开（参见对比文件2的说明书第11栏第38段—第13栏第52段，第19栏第107—108段、图1—22）：金属电极包括：第一和第二金属电极，它们沿着X—轴方向在第一PET薄膜周围电连接到该第一PET薄膜，和第三和第四金属电极，它们沿着Y—轴方向在第二PET薄膜上的上边和下边周围电连接到该第二PET薄膜。因此在对比文件2的基础上结合公知常识从而得到权利要求4所要求保护的技术方案对本领域普通技术人员来说是显而易见的，在上述权利要求所引用的权利要求1不具备创造性的情况下，从属权利要求4也不具备专利法第二十二条第三款规定的创造性。

5、权利要求5对权利要求4作了进一步限定，其附加技术特征已经被对比文件2所公开（参见对比文件2的说明书第11栏第38段—第13栏第52段，第19栏第107—108段、图1—22）：第一、第二、第三和第四金属电极分别连接到第一、第二、第三和第四信号供给线。因此在对比文件2的基础上结合公知常识从而得到权利要求5所要求保护的技术方案对本领域普通技术人员来说是显而易见的，在上述权利要求所引用的权利要求4不具备创造性的情况下，从属权利要求5也不具备专利法第二十二条第三款规定的创造性。

6、权利要求6对权利要求1作了进一步限定，其附加技术特征已经被对比文件2所公开（参见对比文件2的说明书第11栏第38段—第13栏第52段，第19栏第107—108段、图1—22）：显示装置使液晶显示装置。因此在对比文件2的基础上结合公知常识从而得到权利要求6所要求保护的技术方案对本领域普通技术人员来说是显而易见的，在上述权利要求所引用的权利要求1不具备创造性的情况下，从属权利要求6也不具备专利法第二十二条第三款规定的创造性。

7、权利要求7所要求保护的技术方案不具备专利法第二十二条第三款规定的创造性。对比文件2（JP2002182854A）公开了一种用于制造具有驱动器IC的显示装置的触摸面板的制造方法，并具体公开了以下的技术特征（参见对比文件2的说明书第11栏第38段—第13栏第52段，第19栏第107—108段、图1—22）：形成上基板和下基板；在上基板和下基板相对的表面上分别形成PET薄膜（相当于权利要求7的第一和第二透明电极）；在PET薄膜周围形成有多个金属电极；形成柔性印刷电缆，所述柔性印刷电缆具有从上基板和下基板延伸到显示装置的背面并用来向金属电极供给信号电压的多条信号供给线，且该柔性印刷电缆在上基板和下基板的角部向显示装置的背面弯曲，其中，将用于向上基板上的金属电极供给信号的信号供给线印刷在柔性印刷电缆的上表面上，而将用于向下基板上的金属电极供给信号的信号供给线印刷在柔性印刷电缆的下表面上，并且该柔性印刷电缆在与金属电极连接前具有多个通孔，从而将柔性印刷电缆的下表面的信号供给线设置在柔性印刷电缆的上表面上以防止发生短路。该权利要求所要求保护的技术方案与该对比文件所公开的技术内容相比，其区别仅在于“柔性印刷电缆在交叠驱动器IC之前具有多个通孔”。基于上述区别技术特征可以确定，权利要求7相对于对比文件2实际所解决的问题是：防止柔性印刷电缆与驱动器IC之间发生短路。然而，当本领域的技术人员在面对防止柔性印刷电缆与驱动器IC之间发生短路的问题时，根据对比文件2给出的“柔性印刷电缆在与金属电极连接前具有多个通孔，从而将柔性印刷电缆的下表面的信号供给线设置在柔性印刷电缆的上表面上以防止发生短路”的技术启示并结合其掌握的公知常识，容易想到在柔性印刷电缆与驱动器IC交叠之前在其上设置多个通孔从而防止印刷电缆与驱动器之间发生短路。因此，在对比文件2的基础上结合本领域的公知常识以获得权利要求7所要求保护的技术方案，对所属技术领域的技术人员来说是显而易见的，因此权利要求7所要求保护的技术方案不具

备突出的实质性特点和显著的进步，因而不具备创造性。

8、权利要求8对权利要求7作了进一步限定，其附加技术特征为本领域制造柔性印刷电缆的惯用技术手段，属于公知常识，因此在对比文件2的基础上结合公知常识从而得到权利要求8所要求保护的技术方案对本领域普通技术人员来说是显而易见的，在上述权利要求所引用的权利要求7不具备创造性的情况下，从属权利要求8也不具备专利法第二十二条第三款规定的创造性。

9、权利要求9对权利要求7作了进一步限定，其附加技术特征已经被对比文件2所公开（参见对比文件2的说明书第11栏第38段—第13栏第52段，第19栏第107—108段、图1—22）：柔性印刷电缆通过显示装置的驱动器IC延伸，以连接到印刷电路板。因此在对比文件2的基础上结合公知常识从而得到权利要求9所要求保护的技术方案对本领域普通技术人员来说是显而易见的，在上述权利要求所引用的权利要求7不具备创造性的情况下，从属权利要求9也不具备专利法第二十二条第三款规定的创造性。

10、权利要求10对权利要求7作了进一步限定，其附加技术特征已经被对比文件2所公开（参见对比文件2的说明书第11栏第38段—第13栏第52段，第19栏第107—108段、图1—22）：形成第一和第二金属电极，它们沿着X—轴方向在第一PET薄膜周围电连接到该第一PET薄膜，和形成第三和第四金属电极，它们沿着Y—轴方向在第二PET薄膜上的上边和下边周围电连接到该第二PET薄膜。因此在对比文件2的基础上结合公知常识从而得到权利要求10所要求保护的技术方案对本领域普通技术人员来说是显而易见的，在上述权利要求所引用的权利要求7不具备创造性的情况下，从属权利要求10也不具备专利法第二十二条第三款规定的创造性。

11、权利要求11对权利要求10作了进一步限定，其附加技术特征已经被对比文件2所公开（参见对比文件2的说明书第11栏第38段—第13栏第52段，第19栏第107—108段、图1—22）：第一、第二、第三和第四金属电极分别连接到第一、第二、第三和第四信号供给线。因此在对比文件2的基础上结合公知常识从而得到权利要求11所要求保护的技术方案对本领域普通技术人员来说是显而易见的，在上述权利要求所引用的权

利要求10不具备创造性的情况下，从属权利要求11也不具备专利法第二十二条第三款规定的创造性。

12、权利要求12对权利要求7作了进一步限定，其附加技术特征已经被对比文件2所公开（参见对比文件2的说明书第11栏第38段—第13栏第52段，第19栏第107—108段、图1—22）：显示装置使液晶显示装置。因此在对比文件2的基础上结合公知常识从而得到权利要求12所要求保护的技术方案对本领域普通技术人员来说是显而易见的，在上述权利要求所引用的权利要求7不具备创造性的情况下，从属权利要求12也不具备专利法第二十二条第三款规定的创造性。

基于上述理由，本申请的独立权利要求以及从属权利要求都不具备创造性，同时说明书中也没有记载其他任何可以授予专利权的实质性内容，因而即使申请人对权利要求进行重新组合和 / 或根据说明书记载的内容作进一步的限定，本申请也不具备被授予专利权的前景。如果申请人不能在本通知书规定的答复期限内提出表明本申请具有新颖性和创造性的充分理由，本申请将被驳回。

审查员：王楠

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